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09/934,036	08/21/2001	Marion A. Keyes	30203/37509	7791

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MARSHALL, GERSTEIN & BORUN LLP  
233 S. WACKER DRIVE, SUITE 6300  
SEARS TOWER  
CHICAGO, IL 60606

EXAMINER
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AILES, BENJAMIN A

ART UNIT	PAPER NUMBER
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2142

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/934,036

Applicant(s)

KEYES ET AL.

Examiner

Benjamin A. Ailes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 February 2007 has been entered.
2. Claims 1-39 remain pending.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, 7-11, 14-18, 35, 36, 38 are rejected under 35 U.S.C. 102(e) as being anticipated by McIntyre et al. (U.S. 6,813,587 B2), hereinafter referred to as McIntyre.
5. Regarding claim 1, McIntyre discloses a data processing system wherein more than one process plants can have access to an open network (col. 1, lines 29-36 and col. 7, ll. 21-26, McIntyre discloses a supervisory system communicating with process control plants). McIntyre further discloses a primary server in communication with the

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open network, wherein the primary server is adapted to execute a data processing application (col. 2, ll. 32-39, McIntyre discloses the use of a centralized monitoring system which comprises a supervisory process control and manufacturing information application.). The monitoring system receives information from and automatically generated by process plants (col. 2, ll. 49-50, col. 1, ll. 32-36, col. 6, ll. 60-64, McIntyre discloses the monitoring system may receive information about process control from field devices.) McIntyre also discloses the use of a database to store information received from process control plants (col. 6, ll. 57-64, use of data access servers). Finally, the primary server, or monitoring system disclosed by McIntyre sends results from analysis back to process control plants (col. 7, ll. 29-35, process and receive information and control modules.).

6. Claims 35 and 38 contain similar subject matter and are rejected under the same rationale as claim 1.

7. Regarding claim 4, McIntyre discloses the system wherein the open network is the Internet (col. 7, ll. 21-24).

8. Regarding claim 7, McIntyre discloses the system wherein the data processing application is adapted to perform one of a plant optimization function, a real-time process monitoring function, a data reconciliation function, a plant emission analysis function, a plant emissions control function, a dispatch function, a plant control function and an alarming function (col. 6, ll. 60-64, McIntyre discloses the ability to monitor the process plant.).

9. Regarding claim 8, McIntyre discloses the system wherein the data processing application is adapted to perform a data correction function (col. 6, ll. 35-37).

10. Regarding claim 9, McIntyre discloses the system wherein the data correction function is one of a digital verification function, a data validation function, a data reconciliation function, and a data source re-calibration function (col. 6, ll. 35-37).

11. Regarding claim 10, McIntyre discloses the system wherein the data processing application uses continuous emissions monitoring data to generate a plant emissions report (col. 6, ll. 24-30).

12. Regarding claim 11, McIntyre discloses the system wherein the data processing application generates the plant emissions report using a format defined by a governmental authority and communicates the plant emissions report to the governmental authority (col. 6, ll. 24-30).

13. Claim 36 contains similar subject matter and is rejected under the same rationale as claim 11.

14. Regarding claim 14, McIntyre discloses the system wherein the data processing application uses an internet browser application as a visualization layer (col. 6, ll. 35-41).

15. Regarding claim 15, McIntyre discloses the system wherein the internet browser application is executed within a user interface that is physically remote from the first and second process plants (col. 6, ll. 35-41).

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16. Regarding claim 16, McIntyre discloses the system wherein one of the first and second process plants further comprises one of an internet-enabled field device, an internet-enabled field device interface and a data concentration node (col. 1, ll. 32-36).

17. Regarding claim 17, McIntyre discloses the system wherein the one of the internet-enabled field device, an internet-enabled field device interface and a data concentration node includes an embedded data server and an embedded data historian communicatively coupled to the embedded data server (col. 1, ll. 32-36).

18. Regarding claim 18, McIntyre discloses the system wherein one of the first and second plants includes a digital communication network based on one of an RS485, Foundation Fieldbus, Ethernet TCP/IP and a wireless blue tooth protocol (col. 20, lines 3-14, McIntyre discloses the use of TCP/IP (Internet)).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre.

22. Regarding claim 5, McIntyre discloses the system wherein the first process plant is in a first geographic location and the second process plant is in a second geographic location different from the first geographic location (col. 2, ll. 32-40. It is deemed obvious that separate process plants are located and can clearly be located at different geographic locations.).

23. Regarding claim 6, McIntyre discloses the system wherein the first process plant is associated with a first business entity and the second process plant is associated with a second business entity (col. 2, ll. 32-40, in view of the rejection of claim 5, the same reasoning applies to claim 6, specifically the fact that McIntyre discloses conducting transactions (business transactions) in a distributed manner. It is therefore deemed obvious that separate process plants are located separately and can be of different business entities.).

24. Claims 2, 3, 20-34, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre in view of Agrusa et al. (U.S. 2004/0024891 A1), hereinafter referred to as Agrusa.

25. Regarding claims 2 and 3, McIntyre discloses the use of a primary server and a data historian to perform data processing methods needed by process control plants as

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discussed above in the rejection of claim 1, but does not explicitly disclose the use of redundant servers and failover techniques in time of failure. Simply put, McIntyre does not disclose methods of backing up information in time of failure. The need to implement backup systems in all areas where computers are used to store data is well known in the art and many methods are put into place to ensure the safety of data in time of catastrophe. An example of a system that utilizes backup systems is disclosed by Agrusa wherein Agrusa discloses on page 1, paragraph [0006] the use of primary and secondary (backup) computer server systems. The secondary computers are utilized in times that the primary computing server goes down. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the use of failover and back up systems in case the primary computer systems fail and become available. One of ordinary skill in the art would have found it to their advantage and would have been motivated to utilize failover systems because when a failover system is in use, systems will always be available (due to the seamless switch between primary and secondary) and the amount of production lost is greatly reduced.

26. Claim 20 contains similar subject matter and is rejected under the same rationale as claims 1, 2, and 3.

27. Claim 21 contains similar subject matter and is rejected under the same rationale as claim 7.

28. Claim 22 contains similar subject matter and is rejected under the same rationale as claim 16.



29. Claim 23 contains similar subject matter and is rejected under the same rationale as claim 17.

30. Claim 24 contains similar subject matter and is rejected under the same rationale as claims 1, 2, and 3; additionally McIntyre discloses the use of billing techniques to be based on transaction type and usage (col. 9, ll. 45-51, business logic).

31. Claim 25 contains similar subject matter and is rejected under the same rationale as claims 5 and 6.

32. Claim 26 contains similar subject matter and is rejected under the same rationale as claim 7.

33. Claim 27 contains similar subject matter and is rejected under the same rationale as claim 8.

34. Claim 28 contains similar subject matter and is rejected under the same rationale as claim 10.

35. Claim 29 contains similar subject matter and is rejected under the same rationale as claim 11.

36. Claim 30 contains similar subject matter and is rejected under the same rationale as claim 12.

37. Claim 31 contains similar subject matter and is rejected under the same rationale as claim 16.

38. Claim 32 contains similar subject matter and is rejected under the same rationale as claim 17.

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39. Regarding claims 33 and 34, McIntyre discloses the method wherein separate process control entities can purchase the use of the analysis system via a one time payment or they have the opportunity to pay alternatively by way of paying based on usage characteristics (col. 9, ll. 45-51, business logic).

40. Claim 39 contains similar subject matter and is rejected under the same rationale as claims 2 and 3.

41. Claims 12-13 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre in view of Keeler et al. (U.S. 5,386,373), hereinafter referred to as Keeler.

42. Regarding claim 12, McIntyre disclosed the data processing application according to claim 1 above, but is silent on the use of plant emissions minimization and plant emissions optimization. However, in the related art of continuous emission monitoring, Keeler discloses multiple methods of achieving plant emissions minimization and optimization. By way of example, Keeler discloses a neural net technique used for minimization and optimization (see Keeler, col. 6, lines 8-55). It would have been obvious to one of ordinary skill in the art at the time the application was made to combine the plant emissions minimization and optimization as disclosed by Keeler with the data processing application disclosed by McIntyre. One would have been motivated to make this combination in order to create a control system for emissions minimization and optimization (see Keeler, col. 7, lines 13-22, and 26-36).

43. Regarding claim 13, McIntyre disclosed the data processing application according to claim 1 above, but is silent on the use of a compensatory control function. However, in the related art of continuous emission monitoring, Keeler discloses a

method for achieving compensatory control. Keeler discloses a control function used for implementing a compensatory control function in order to optimize the inputs to the actual plant (see Keeler, col. 7, lines 12-46). It would have been obvious to one of ordinary skill in the art at the time the application was made to combine the plant emissions compensatory control function as disclosed by Keeler with the data processing application disclosed by McIntyre. One would have been motivated to make this combination in order to create a control system for emissions compensatory control (see Keeler, col. 7, lines 18-22).

44. Regarding claim 37, in accordance with claim 36, McIntyre teaches the need for a regulatory authority but does not explicitly state the use of the Environmental Protection Agency. Keeler discloses by way of example uses the Environmental Protection Agency (EPA). One of ordinary skill in the art would have been motivated to associate with the EPA because the EPA is well known in the art as an existing regulatory body in the government that sets up rules and regulations that industries must abide by (see Keeler, col. 1, lines 16-30, specifically lines 20-23).

45. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntyre in view of Funkhouser (U.S. 5,784,570), hereinafter referred to as Funkhouser.

46. Regarding claim 19, McIntyre disclosed the need to send information between a client and a server (see McIntyre, col. 20, lines 3-14) but failed to disclose the use of a data compression technique. However, in related art, Funkhouser teaches the use of a data compressor that compresses the data before the data is transmitted from a server to a client (see Funkhouser, col. 2, lines 33-37). It would have been obvious to one of

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ordinary skill in the art at the time the application was made to utilize the data compression technique taught by Funkhouser with the client-server transmission method disclosed by McIntyre. One of ordinary skill in the art would have been motivated to make the combination in order to implement the client/server data transmission using data compression in order to allow for more effective bandwidth use and use less local memory (see Funkhouser, col. 2, lines 40-46).

***Response to Arguments***

47. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hansen (US 2007/0011295 A1) teaches reporting the state of an apparatus to a remote computer.

Knepler et al. (US 7,162,391 B2) teaches remote beverage equipment monitoring and control system and method.

Nagafuchi et al. (US 6,907,320 B2) teaches a power plant operation control system and a power plant maintaining and managing method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "Andrew Caldwell", with a stylized, cursive script.

ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER